



# TECHNICAL BULLETIN METAL HALIDE

## EYE Color Arc® M70P36S/SDW

ANSI Code: M139/O

Product Code: 55452

**Features:**

- High color rendering, CRI=96
- Open fixture rated
- Compact PAR36 bulb with medium screw base
- UV-block coating on the outer bulb

### PERFORMANCE DATA

Initial lumens at rated watts after 100 hours operation	3000	Lumens
Beam lumens	720	Lumens
Mean lumens (typical)	2100	Lumens
Beam angle @ 50% peak intensity	26	Degrees
Peak intensity	7020	Candela
Rated average life	6000	Hours
Warm up time (90% lumens)	4	Minutes
Correlated color temperature	3500	K
CIE chromaticity	0.402, 0.387	X, Y
Color rendering index	96	
Operating Position	Universal	
Time to hot re-start	15 max	Minutes

### ELECTRICAL CHARACTERISTICS

Nominal lamp wattage	70	Watts
Nominal lamp voltage	90	Volts
Nominal lamp current	1.0	Amps
Current crest factor	1.8 max	
Min. Starting voltage	198	Vrms
Min. Starting voltage	280	Vpk
Max. Starting current	1.5	Amps
Socket rating	4.0	kV
Dimming capability	No	

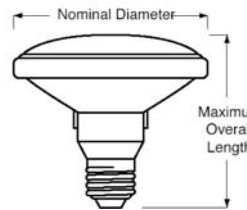
Ignitor Requirements	Option 1	Option 2	
Min. Pulse Height	3.0	3.0	kV
Max. Pulse Height	4.0	4.0	kV
Min. Pulse Width	1.0@2.7	1.9@2.7	µsec@kV
Min. Pulse Repetition	2	1	/half cycle
Pulse Positions	60-90, 240-270	64-110, 244-290	degrees

### PHYSICAL DESCRIPTION

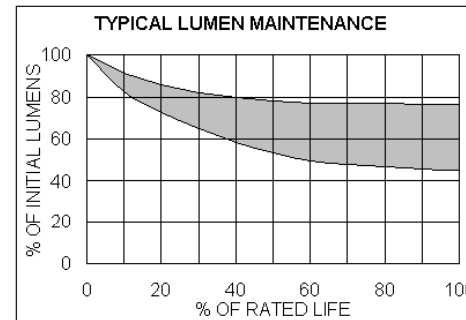
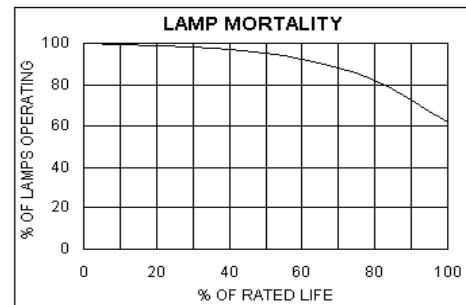
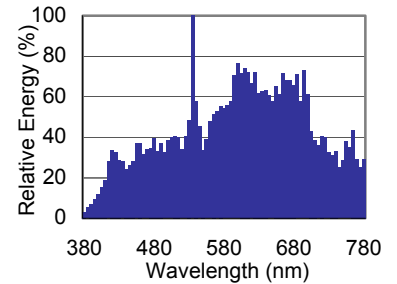
Maximum overall length	4.016(102)	in (mm)
Bulb diameter	4.410(112)	in (mm)
Base to bulb eccentricity	3	Deg Max.
Maximum base temperature	374(190)	°F (°C)
Maximum bulb temperature	752(400)	°F (°C)
Bulb designation	PAR36	
Bulb material	Hard glass	
Arc tube material	Quartz	
Bulb finish (front glass)	UV-block coating	
Bulb finish (reflector)	Aluminum coating	
Base designation	E26 Skirted Medium	

### FIXTURE REQUIREMENT

O Rated – Open or enclosed fixtures. Protect lamp form direct contact with water.



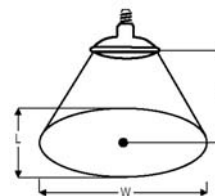
### SPECTRAL DISTRIBUTION



### PHOTOMETRIC DATA

Initial Footcandles			
Beam Angle at 50% Peak Intensity 65°			
H (ft)	Foot Candle Beam Center	Beam Diameter L (ft)	Beam Diameter W (ft)
6	195	2.77	2.77
8	110	3.69	3.69
10	70	4.62	4.62
12	49	5.54	5.54
14	36	6.46	6.46

Candlepower Distribution	
Beam Angle	Candela
0°	5075
5°	4936
10°	4077
15°	2506
20°	1274
25°	668
30°	472
35°	414
40°	381
45°	318
50°	245
55°	211
60°	203
65°	223
70°	197
75°	197
80°	167
85°	135
90°	113





**⚠WARNING**

This lamp can cause serious skin burn and eye inflammation from short-wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.

**RISK OF ELECTRIC SHOCK**

- Turn power off before inspection, installation or removal
- Protect lamp from direct contact with liquids to avoid breakage from thermal shock

**RISK OF FIRE**

- Keep combustible materials away from lamp during operation

**UNEXPECTED LAMP RUPTURE MAY CAUSE INJURY, FIRE, OR PROPERTY DAMAGE**

- Do not exceed rated ballast voltage
- Do not use lamp if outer glass is scratched or broken.
- Do not use beyond rated life
- Do not turn on lamp until fully installed
- Use only with a fixture and ballast rated for this product
- Turn lamp off at least once a week for 15 minutes
- Electrically insulate any metal to glass support in fixture

**⚠CAUTION**

**RISK OF BURN**

- Allow lamp to cool before handling.

**LAMP MAY SHATTER AND CAUSE INJURY**

- Do not use excessive force when installing lamp
- Dispose of lamp in a closed container

**LAMP OPERATING INSTRUCTIONS**

This is a discharge lamp and requires some time to restart and come up to full brightness after a power interruption.

**R**

Conforms to:  
USA: 21CFR1040.30

**Hg-LAMP CONTAINS MERCURY**

Manage in Accord with Disposal Laws

See: [www.lamprecycle.org](http://www.lamprecycle.org) or 1-888-665-2677

